

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

TQP DEVELOPMENT, LLC,

Plaintiff,

vs.

MERRILL LYNCH & CO., INC. et al.,

Defendants.

Civil Action No. 2:08cv471

**ING BANK FSB, SHAREBUILDER SECURITIES CORPORATION, SHAREBUILDER
CORPORATION, TD AMERITRADE HOLDING CORPORATION AND TD
AMERITRADE, INC.'S JOINT OPENING CLAIM CONSTRUCTION BRIEF**

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Pursuant to local Patent Rule (P.R.) 4-5(b) of the United States District Court for the Eastern District of Texas, and the Court's Docket Control Order dated January 15, 2010 (Dkt. No. 299), Defendants ING Bank fsb, ShareBuilder Securities Corporation, ShareBuilder Corporation, TD Ameritrade Holding Corporation, and TD Ameritrade, Inc. ("Defendants"), hereby jointly submit their Opening Claim Construction Brief in support of the constructions proposed in the Joint Claim Construction and Prehearing Statement ("JCCS").

I. Background and Technology

The patent-in-suit is U.S. Patent No. 5,412,730 ("the '730 Patent"), entitled "Encrypted Data Transmission System Employing Means For Randomly Altering The Encryption Keys." The '730 Patent has two claims. Claim 1 is the sole claim asserted in this case. Defendants direct the Court to the background of the '730 Patent and related technology described in the tutorial that will be filed with the Court in advance of the Claim Construction hearing.

II. Applicable Legal Principles Of Claim Construction

In this case, standard principles of claim construction apply. For example, it is well established that the correct claim construction is the one that stays true to the claim language and naturally aligns with the intrinsic evidence. *See Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998). Defendants' constructions flow directly from the plain meaning of the words of the claim, from the well-recognized best source for understanding the technical claim terms, and hold the applicant to the full breadth of what he surrendered in light of the intrinsic evidence. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1315-1317 (Fed. Cir. 2005).

III. Status of P.R. 4-2(c) Conference

The parties have not agreed on any proposed constructions in claim 1. Upon receipt of TQP's proposed constructions, Defendants mailed a letter to TQP on September 2, 2010, offering proposals for harmonizing the constructions submitted in the JCCS in light of assertions

and admissions made by TQP in its opening brief. TQP did not respond to Defendants' letter. Notwithstanding, this brief addresses the constructions identified in the letter. (*See* Ex. 1, Defs.' letter to TQP, Sept. 2, 2010.)

IV. Disputed Claim Terms

A. "Blocks"

<u>DEFENDANTS' CONSTRUCTION</u>	<u>TQP'S CONSTRUCTION</u>
<u>Original Proposal</u> : "groups of bits, each group having a length greater than 32 bits" <u>Compromise Construction</u> : "groups of bits, each group having a length greater than a word length"	"groups of bits"

The Patent Office issued the '730 Patent only after the applicant limited its claims to data that was transmitted in "blocks." The applicant distinguished "blocks" from alternative forms of data, such as bytes (8 bits each) and words (16 or 32 bits each), in the specification. TQP is now attempting to erase a limitation on which the Patent Office relied by construing "blocks" so broadly that the term becomes coextensive with the "data" originally claimed. (*See* '730 Patent File History at Ex. 1, TQP's Opening Cl. Constr. Br. TQP0000337-39, 344-48.) Defendants' proposed construction of "blocks," which retains the distinction from bytes and words, flows directly from the intrinsic evidence and standard industry connotations, and should be adopted.

The requirement that the "data" be in the form of "blocks" is clear from the claim language, but the claims themselves provide no further insight into the meaning or scope of "blocks." The specification provides no express definition of "blocks" and does not mention "blocks" until column 3. (*See* '730 Patent, 3:19-21 ("the block counter 21 may simply count the number of bytes (characters), words or *blocks* of data being transmitted") (emphasis added).) Since Column 3 provides the only description of "blocks" in the specification, this description must be reflected in the proper construction of the term. *See Pandrol USA, LP v. Airboss Ry. Prods., Inc.*, 320 F.3d 1354, 1363 (Fed. Cir. 2003) (noting that where the only discussion of a

claim term is within the description of preferred embodiments, it may limit the claim); *see also MBO Labs., Inc. v. Becton, Dickinson & Co.*, 474 F.3d 1323, 1329 (Fed. Cir. 2007) (“[T]he words of patent claims have the meaning and scope with which they are used in the specification and the prosecution history.”).

Column 3 describes bytes as groups of 8 bits and words as groups of 16 or 32 bits. (*See* ‘730 Patent 3:13-16.) Blocks are identified separately from, and as an alternative to, bytes and words. *See Schumer v. Lab. Comp. Sys., Inc.*, 308 F.3d 1304, 1311-12 (Fed. Cir. 2002) (“[the Federal Circuit has] consistently interpreted the word ‘or’ to mean that the items in the sequence are alternatives to each other.”). There is no suggestion in the specification that the term “blocks” is a genus broader in scope than the species “bytes” or “words.”¹ Blocks thus cannot be construed as merely “groups of bits” without ignoring the applicant’s decision to identify bytes, words, and blocks as alternative and distinct forms of data. (*See* ‘730 Patent 3:19-21.)

Furthermore, the applicant chose to identify bytes, words, and blocks of data in a series that starts with a shorter group of bits (bytes), followed by a longer group (words). (*See* ‘730 Patent 3:13-21.) Absent counter indications or counterexamples in the specification, it is proper to infer that the third item in the applicant’s series follows that same pattern. “Blocks” must therefore be construed as groups of bits that are longer than words. While Defendants agree with TQP that the specification does not limit blocks to a particular numerical length, the specification does strongly suggest that the length of bytes and words cannot be the same as blocks. (*See* ‘730 Patent 3:13-21.) Blocks may therefore have any length longer than a single word length.

Defendants’ construction of “blocks” as being distinct from bytes and words is compelled by the applicant’s disclaimer in the prosecution history. In order to overcome a prior art

¹ The ‘730 specification does *not* say, for instance, “bytes, words, or *other* blocks of data.”

rejection, the applicant narrowed the term “data” by adding the limitation “comprising a sequence of blocks,” previously recited in a dependent claim. (*See* ‘730 Patent File History at Ex. 1, TQP’s Opening Cl. Constr. Br. TQP0000337-39, 344-48.) The applicant thereby surrendered any form of “data” not limited to “blocks” in some meaningful way. *See Norian Corp. v. Stryker Corp.* 432 F.3d 1356, 1361-62 (Fed. Cir. 2005). According to the patent, “data” itself refers to groups of bits, i.e., “files” of bytes, words, or blocks. (*See* ‘730 Patent 3:13-21.) “Blocks” must therefore narrow the scope of “data” in order to overcome the prior art, by excluding certain forms of data. The only defining feature of a block with which to narrow the term “data” is length. The only alternative forms of data to exclude are bytes and words.

The extrinsic evidence confirms that Defendants’ construction of “blocks” as being longer than words is in agreement with the meaning that would have been understood by one of ordinary skill. The ‘730 Patent often refers to the interoperability of the claimed invention with the national standard DES algorithm, a well-known “block cipher” that operates on 64 bit (8 byte) “blocks” of data. (*See, e.g.*, ‘730 Patent 3:45-50; 11:11-14.) The applicant’s reference to DES, in the absence of any other explicit description of “blocks,” would have led one skilled in the art to understand “blocks” to carry the standard industry meaning: groups of bits larger than bytes and words, typically 64 bits in length. (*See* Ex. 2, Federal Info. Processing Standard 81, DES Modes of Operation, 1980 at § 1.1 (defining “block” as “[a] binary vector consisting of sixty-four bits . . .”).² The Court should adopt Defendants’ construction of “blocks” as “groups of bits, each group having a length longer than a word length” as this construction naturally aligns with the intrinsic record and is supported by the extrinsic evidence.

² *Cf. VirnetX, Inc. v. Microsoft Corp.*, No. 6:07-cv-80, 2009 U.S. Dist. LEXIS 65667, *27-30 (E.D. Tex. July 30, 2009) (consulting consistent industry standard definition in construing the claim term “web site” to determine how one of skill in the art would understand that term).

B. “Providing a Seed Value to Both Said Transmitter and Receiver”

<u>DEFENDANTS’ CONSTRUCTION</u>	<u>TQP’S CONSTRUCTION</u>
<u>Original Proposal</u> : “supplying the same value to both the transmitter and receiver from outside the transmitter and receiver, where the value is a necessary input to produce the sequence of pseudo-random key values at the transmitter and receiver” <u>Compromise Construction</u> : “supplying the same seed value to both the transmitter and the receiver from outside the transmitter and receiver” ³	No construction necessary

The method defined by the claim requires that a seed value be *provided to* the transmitter *and* that the same seed value be *provided to* the receiver. Defendants and TQP agree that “a seed value” as used in this term means “the same seed value” and is “necessary to generate” the first and second sequences.⁴ It is uncontroverted that the seed value is a necessary *input* to produce the sequences, and this in fact is expressly claimed.⁵ However, and contrary to TQP’s assertions, the plain language of the claim requires the seed value to be provided to both the transmitter and receiver from an external source. Any other interpretation would read the “provided to both” limitation out of the claim. The recipient of an object that is actively being *supplied* to it does not already possess that object. Similarly, if the transmitter and receiver must *both* be provided with the same seed value, then neither could have possessed that seed value prior to this step. Otherwise, it would be superfluous to require the seed value to be provided to both the transmitter and the receiver. *Cf. Elekta Instrument S.A. v. O.U.R. Scientific Int’l*, 214 F.3d 1302, 1307 (Fed. Cir. 2000) (refusing to construe a claim such that it rendered a word superfluous).

³ See Ex. 1, Defs.’ letter to TQP, Sept. 2, 2010 at 1.

⁴ See TQP’s Opening Cl. Constr. Br. 6, 7 (“It is understood that the same seed value would be provided to the transmitter and receiver. . . [I]f the Court is inclined to construe this term, it should be construed as providing the same seed value to both the transmitter and receiver.”)

⁵ See Ex. 1, Defs.’ letter to TQP, Sept. 2, 2010 at 1; ‘730 Patent 1:43-48; 3:26-33 Fig. 1.

Defendants' construction of "providing a seed value to both the transmitter and receiver" is supported by the intrinsic evidence. The specification uses the words "providing" and "supplying" interchangeably and describes the transmitter and receiver as being *supplied* with the seed value from outside the transmitter and receiver. (*See, e.g.*, '730 Patent 1:45-48; 3:29-33; 4:3-9; 5:15-19; *see also* Fig. 1 (showing the "seed value" and "interval number" supplied from a source outside the transmitter and receiver); 2:16-22 ("[o]nce the host station has *supplied the initial seed value keys* to the units forming the two terminal locations for a given link").)

TQP advances the strawman argument that Defendants allegedly import limitations from the preferred embodiment. Defendants suggest no such construction. In the preferred embodiment illustrated at Figure 1, the seed value is provided to both the transmitter and receiver by the *same* source, Defendants' proposed construction does not require that a single source provide the seed value. As long as the same seed value reaches both the transmitter and receiver, the signal could originate from different external sources. Defendants thus promote the limitation identified in the claim, not the further limitation in the preferred embodiment.

The prosecution history further supports Defendants' construction. The Examiner rejected the asserted claims as anticipated by each of the Lee, Weldon and Feistel patents during prosecution. (*See* Final Office Action, July 8, 1993 at Ex. 1, TQP's Opening Cl. Constr. Br. TQP0000329-333; *see also* Ex. 3, U.S. Pat. No. 4,484,027 to Lee *et al.*, U.S. Pat. No. 4,723,246 to Weldon, Jr., U.S. Pat. No. 4,316,055 to Feistel.) The Examiner asserted that these three references, in light of the Kranakis reference, inherently provided seed values to pseudo-random number generators at the transmitter and receiver. (*See* Final Office Action, July 8, 1993 at Ex. 1, TQP's Opening Cl. Constr. Br. TQP0000330; *see also* Ex. 3, Evangelos Kranakis, *Primality and Cryptography* 98-99 (1986).) Significantly, the Examiner considered and ruled out the

possibility that the claim could be distinguished from the prior art by the transmitter or receiver performing the “providing” step, noting that the claim language “does not link the provision of the ‘seed value’ to the transmitter and the provision of the ‘seed value’ to the receiver.” (*See* Final Office Action, July 8, 1993 at Ex. 1, TQP’s Opening Cl. Constr. Br. TQP0000330.) The Examiner also considered and ruled out the possibility of the transmitter or receiver creating the seed value and thereby “providing” it to itself, emphasizing that “[‘providing’] does not indicate that the ‘seed value’ is generated.” *Id.* The applicant did not object to the Examiner’s interpretation of this claim term. *Cf. Elkay Mfg. Co. v. Ebco Mfg. Co.*, 192 F.3d 973, 979 (Fed. Cir. 1999) (noting that failure to object to an examiner’s interpretation of a claim ordinarily disclaims a broader interpretation). Ordinary meaning and intrinsic evidence thus compel Defendants’ revised construction that “providing . . . to both . . .” requires an external source.

C. “Pseudo-random key values”

Defendants	TQP
Original Proposal: key values that are a function of at least the seed value Compromise Construction: key values that result from a function	key values that are apparently random but repeatable and predictable

There is no dispute that this term requires construction and that the construction should include “key values.” TQP’s proposed construction makes the claim vague, and possibly indefinite, while improperly importing extraneous limitations to avoid impending validity arguments. Defendants propose a compromise construction that resolves the redundancy concerns expressed in TQP’s brief and is consistent with the only explanation in the specification.

TQP’s attempts to rely on Magistrate Judge Love’s construction of this term in *PACid Group, LLC v. Apple, Inc.*, No. 6:09-CV-143 (E.D. Tex. Apr. 21, 2010), by linking that construction to this case, are inappropriate. In *PACid*, the “inventor provided an express

definition for the disputed term.” *Id.* at *9. The *PACid* court did not need to, and did not, determine the ordinary meaning of “pseudo-random key values” in the absence of the applicant’s express definition. TQP does not dispute that the ‘730 Patent lacks a definition of this term. As a result, the *PACid* court’s conclusion does not apply here.

The insertion of the term “apparently” in TQP’s proposed construction makes any objective measure of claim scope impossible. TQP offers no explanation of who would determine whether a sequence of values are “*apparently* random” or how they would do it. This Court has rejected as indefinite proposed constructions that would rely on the subjective determination of a consumer. *Crane Co. v. Sandenvendo Am. Inc.*, No. 2:07-cv-42-CE, 2009 WL 1586704, *13 (E.D. Tex. June 5, 2009). TQP’s proposal does not even specify an observer to make the subjective determination of whether the values are apparently random. *Cf. id.*

Even assuming that TQP’s proposed construction were not fatally vague, there is no support in the specification to import this limitation. Likewise, TQP’s assertion that pseudo-random key values “must be repeatable and predictable” is not supported by any cited intrinsic or extrinsic evidence. None of the terms “apparently,” “repeatable,” or “predictable” appear in the specification with respect to key values. Contrastingly, the applicant used the term “predictable” in the specification when describing the interval number. (‘730 Patent 1:60-65.) The applicant knew how to use the term “predictable” and chose not to use it to describe key values.

Defendants’ originally proposed construction reflected the fact that the pseudo-random key values must be based on the random seed value as mandated by the claim language and confirmed in the prosecution history. The Examiner noted that the “use of seed values is inherent in pseudorandom number generators.” (Final Office Action, July 8, 1993 at Ex. 1, TQP’s Opening Cl. Constr. Br. TQP0000330.) The applicant did not counter the Examiner’s

assertion of inherency. (*See* Amendment After Final, Dec. 8, 1993 at Ex. 1, TQP’s Opening Cl. Constr. Br. TQP0000337-339.) TQP complained that referencing the seed value is redundant with the surrounding claim language.⁶ That objection, however, is addressed by Defendants’ proposed compromise construction: “key values that result from a function.”

The applicant included only one explanation in the specification of how the pseudo-random key values are formed. The pseudo-random number generator 23 produces a key sequence that is used by the encryptor. (‘730 Patent 3:26-29; Fig. 1.) The specification states that “[t]he content of the key sequence is predetermined by the combination of (1) the internal makeup of the generator 23 and by (2) a supplied random number seed value which initializes the generator 23.” (‘730 Patent 3:29-32.) In other words, the generator has an internal function that it applies to the random seed value to generate the keys. Nothing more is required. Defendants’ construction includes this embodiment, without adding unnecessary limitations. The Court should adopt Defendants’ simple construction that aligns with the intrinsic evidence.

D. “Each New Key Value in said [First] Sequence Being Produced at a Time Dependent Upon a Predetermined Characteristic of the Data Being Transmitted Over said Link”

<u>DEFENDANTS’ CONSTRUCTION</u>	<u>TQP’S CONSTRUCTION</u>
“All of the key values in the first sequence are generated at different points in time determined by a predetermined condition of the data being satisfied at the transmitter” ⁷	“a new key value is produced when a condition based on a predetermined characteristic of the transmitted data is met”

The plain meaning of this claim term and the intrinsic record establish that the key values in the first sequence are generated one at a time, while the data are being transmitted over the link, with each new key value being generated at the time that each corresponding characteristic of the data is satisfied at the transmitter. (*See* ‘730 Patent 3:27-40.) Thus, Defendants’

⁶ *See* TQP’s Opening Cl. Constr. Br. 8.

⁷ *See* Ex. 1, Defs.’ letter to TQP, Sept. 2, 2010 at 2.

construction of this term is supported by the plain meaning of the words in the claim as they would have been understood by a person of ordinary skill. In contrast, by replacing “each new key value” with “a new key value,” TQP completely ignores the plain meaning of the word “each” by reading that word out of the claim entirely. In the claim, the modifiers “each” and “new” connect the individually generated key values to the successive satisfaction of the predetermined condition of the data. Defendants and TQP agree that the word “produced” as used in the patent means “generated.”⁸ The ordinary meaning of “each” signifies that the limitations to follow apply to all key values being generated in the sequence. The ordinary meaning of “new” requires that each key value being generated in the first sequence not have been in existence prior to its generation. Since the first sequence is generated at the transmitter, with each new key value being generated in the first sequence at a time dependent upon data being transmitted from the transmitter, the time-determining characteristic of the data must be satisfied at the transmitter. Putting these pieces together: (1) all of the key values in the first sequence are generated at different points in time since each is “new”; and (2) the timing of the generation is determined by a condition of the data known to both the transmitter and the receiver, but satisfied at the transmitter. Thus, key values are generated one at a time, while the data are being transmitted over the link, with each new key value being generated at the time that each corresponding characteristic of the data is satisfied.

Defendants’ proposed construction is also supported by the intrinsic evidence. The specification describes the mechanism by which key values are produced by the generator 23. The generator 23 responds to each advance signal provided at an advance input of the generator 23 by changing its output to the next successive, i.e., “new” encryption key value. (*See* ‘730

⁸ *See* Ex. 1, Defs.’ letter to TQP, Sept. 2, 2010 at 2; *see also* TQP’s Opening Cl. Constr. Br. 9, 13 (“The claim terms [D and E] refer to the generation of key values at the transmitter and receiver, respectively . . . [T]hese portions of the specification describe the generation of new key values for the first and second sequences . . .”).

Patent 3:27-40.) Thus, the output of the generator 23 is a sequence of key values, specifically the first sequence, with respective key values outputted one at a time to produce successive key values at different points in time. The Court should adopt Defendants' construction that flows from the plain meaning of the claim terms and the intrinsic evidence.

E. "Data Being Transmitted Over Said Link"

<u>DEFENDANTS' CONSTRUCTION</u>	<u>TQP'S CONSTRUCTION</u>
"data on the link between the transmitter and receiver"	No construction necessary

Defendants agree with TQP that the Court should construe this claim term consistently with its plain meaning. The parties sharply dispute, however, what that plain meaning is. TQP asserts that the claim terms at Sections "D," *supra*, and "F," *infra*, are "identical" despite the recitation of "data being transmitted" at "D" and "data transmitted" at "F." *See* TQP's Opening Cl. Constr. Br. 9. TQP then proposes an identical construction of "transmitted data" for both claim terms. *Id.* TQP's construction impermissibly alters verb tenses so as to conveniently ignore both the importance of construing the time at which the determining characteristic occurs, and the prosecution history of the '730 Patent. In particular, TQP ignores the applicant's amendment to the claims to overcome the Examiner's indefiniteness rejection. This amendment distinguished between satisfying the characteristic for the first sequence based on the "data being transmitted" and satisfying the characteristic for the second sequence based on the "data transmitted." (*See* '730 Patent File History at Ex. 1, TQP's Opening Cl. Constr. Br. TQP0000297, 306, 312-16.)

Data that are "*being* transmitted" are data *actively* in the process of transmission. The data transmission process is actively underway when at least one block of data is on the communication link between the transmitter and the receiver. (*See, e.g.,* '730 Patent, Fig. 1

(depicting the communication link 13 between the transmitter and receiver).) In the context of the claim, the generation of each individual new key value in the first sequence is linked in time to the satisfaction of a particular characteristic of the data *being* transmitted. It is therefore essential to pinpoint the time at which the determining characteristic occurs.⁹ For the first sequence, the individual key values are generated at times dependent on a predetermined condition of data actively in the process of transmission between the transmitter and receiver. The different key values are thus generated at times when the data on the link satisfy the predetermined condition.

Absent the proposed construction of the term “data being transmitted,” and in the absence of any other applicable construction, this term is indefinite.¹⁰ *See Energizer Holdings v. ITC*, 435 F.3d 1366, 1371 (Fed. Cir. 2006) (holding that a claim that is not amenable to construction is indefinite). Because the satisfaction of the data characteristic must occur at a particular, consistently determined moment in time, “data being transmitted” must refer to data at one specific stage of transmission, namely data actively in the process of transmission between the transmitter and the receiver. The specification and claim language provide no basis to construe the term to refer to a transmission state other than one that is actively underway, i.e., on the communication link 13. If this claim term does not refer to data on the link between the transmitter and receiver by virtue of its plain meaning, then there is no way to determine which data must satisfy the predetermined condition, and consequently no way to determine the particular moment in time at which each new key value is generated. Accordingly, the Court

⁹ *See, e.g.*, ‘730 Patent 1:54-58; 3:19-25, 64-4:1.

¹⁰ Defendants’ indefiniteness argument is obviously in the alternative. TQP’s accusation of inconsistency is therefore misplaced. *See* Fed. R. Civ. P. 8(d)(3) (“A party may state as many separate claims or defenses as it has, regardless of consistency.”).

should adopt Defendants’ construction of “data being transmitted” or else hold that the term is indefinite for failing to identify which data must satisfy the predetermined condition.

F. “Each New Key Value in said [Second] Sequence Being Produced at a Time Dependent Upon said Predetermined Characteristic of said Data Transmitted Over said Link”

<u>DEFENDANTS’ CONSTRUCTION</u>	<u>TQP’S CONSTRUCTION</u>
“All of the key values in the second sequence are generated at different points in time determined by the condition of the data used for production of the key values in the first sequence being satisfied at the receiver”	“a new key value is produced when a condition based on a predetermined characteristic of the transmitted data is met”

Although this claim term appears to be similar to the term previously construed at Section “D”, *supra*, the different context and different antecedents require a further construction. TQP mischaracterizes this claim term as using identical language as the previous claim term to be construed. (*See* TQP’s Opening Cl. Constr. Br. 9 n.4 (“The only difference between the claim terms is the use [sic] ‘the Data’ and ‘said Data.’”).) Apart from the difference identified by TQP, other differences exist between the claim terms.

Here, “said sequence” is the second sequence, and the key values are produced by the receiver rather than by the transmitter. The receiver produces key values at times dependent on a predetermined condition of data that have already been transmitted, rather than data that are actively being transmitted. “[S]aid data transmitted over said link” must refer to data at the receiver. This claim limitation cannot apply to data situated prior to the receiver, since the receiver must receive data before it can change keys. Thus this term cannot properly be construed to refer to the same data in the same transmission state as in the previous term.

The condition of the data must be the same as the condition satisfied at the transmitter in generating the first sequence; otherwise the first and second sequences are not identical as required by the claim. Since the second sequence is generated at the receiver, with each key

value generated at a time dependent on data being received at the receiver, the time-determining condition of the data must be satisfied at the receiver. TQP's construction overlooks the distinction between the condition being satisfied at the receiver as opposed to at the transmitter.

Properly accounting for these distinctions yields: "all of the key values in the second sequence are generated at different points in time determined by the condition of the data used for production of the key values in the first sequence being satisfied at the receiver."

G. "A New One of said Key Values in said First and said Second Sequences Being Produced Each Time a Predetermined Number of said Blocks are Transmitted Over said Link"

<u>DEFENDANTS' CONSTRUCTION</u>	<u>TQP'S CONSTRUCTION</u>
"one new pseudo-random key value in the first sequence is generated every time a predetermined number of blocks, where the number of blocks is greater than one, have been transferred to the link between the transmitter and receiver, and one new pseudo-random key value in the second sequence is generated every time the number of blocks have been received at the receiver" ¹¹	"a new key value in the first and second sequences is produced after a predetermined number of blocks are transmitted"

Defendants' construction clarifies how the production of "a new one of said key values in said first and second sequences" is related to transmission of data by detailing the production process vis-à-vis the first and second sequences separately. TQP's construction completely ignores the limitation "over said link" and thus ignores the difference in location between the transmitter and receiver along the data processing path. TQP's construction also ignores the limitation that only *one* new key value in each sequence is recited in this claim term.

At the transmitter, the plain meaning of the claim term is that one new key value in the first sequence is generated every time a predetermined number of blocks are transmitted, i.e., are transferred to the link. As discussed in Sections "D" and "F", *supra*, the production of key

¹¹ See Ex. 1, Defs.' letter to TQP, Sept. 2, 2010 at 2.

values in the second sequence must be tied to the reception of blocks at the receiver, rather than to the transfer of blocks to the link. It follows that the receiver must receive data before it can change keys. (See ‘730 Patent 3:64-4:1; Fig. 1 (showing mechanism for generator 27 to produce key values in the second sequence after blocks have been received by receiver).)

The “predetermined number” of blocks is plural in nature, i.e., “a predetermined *number* of said blocks *are* transmitted.” This use of the word “number” is consistent with the common dictionary definition. (See Defs.’ P.R. 4-2 Disclosures, Ex. A at Ex. 2, TQP’s Opening Cl. Constr. Br. 24 (“as a collective noun, NUMBER, when preceded by *a*, is most often treated as a plural”) (emphasis in original).)

Defendants’ construction of “each time” as “every time” is based on the plain meaning of “each.” In contrast, TQP’s construction of “each time” as “after” would only require production of a new key value *at some time after* the predetermined number of blocks are transmitted, as opposed to *each time* the predetermined number of blocks are transmitted. TQP’s construction not only reads the term “after” into the claim, it does so without any basis in the specification. If “each” simply means “after,” as TQP suggests, then all of the key values could be generated long after the completion of all data transmission, in any order. Defendants’ construction reflects the fact that one new key value must be generated after the first transmission, another one new key value must be generated after the second transmission, and so forth, for each of the transmitter and receiver, respectively.

V. Conclusion

Defendants respectfully request that the Court adopt their proposed constructions of the disputed claim terms and phrases because those constructions are the ordinary and customary meaning under the current state of the claim construction law and the constructions are compelled by the intrinsic record of the patent-in-suit and corroborated by the extrinsic evidence.

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Respectfully Submitted,

By: /s/ Jordan T. Fowles

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CERTIFICATE OF SERVICE

The undersigned certifies that the foregoing document was filed electronically in compliance with Local Rule CV-5(a). As such, this motion was served on all counsel who are deemed to have consented to electronic service. Local Rule CV-5(a)(3)(A). Pursuant to Fed. R. Civ. P. 5(d) and Local Rule CV-5(e), all other counsel of record not deemed to have consented to electronic service were served with a true and correct copy of the foregoing by certified mail, return receipt requested, on this 22nd day of September, 2010.

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